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OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION

Research Roundup

Bovine somatotropins: Benefits and risks 1009

Letters

Confusion over toxicity of poinsettia 1004

Taurine for cats 1005

Zoonosis Update

Anthrax 1028

The Human Side of Veterinary Medicine

Narcissistic clients 1032

Economic Note

1987 US veterinary practice income, expenses, and
financial ratios 1100

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Letters

- On use of "veterinary" 1004
- Confusion over toxicity of poinsettia 1004
- Animal technicians—the glue that holds
a practice together 1005
- Nasal bone fractures in Greyhounds 1005
- Taurine for cats 1005
- Regards commentary on animal rights
as insensitive 1006
- Liposuction for cats? 1006
- Veterinarians should be aware of ecologic
and environmental problems 1006

News

- Research Roundup**—Bovine somatotropins:
benefits and risks 1009
- AVMA at Work** 1013
- Edge of Education**—Veterinary medical
education today 1014
- Insurance Information**—How insurance rates
are determined 1016
- Washington Watch**—Federal legislation
pending 1017
- Awards and Honors** 1017
- Regulatory Front**—Dispensing drugs to
nonclients is risky 1018
- Alabama's sign averts problems 1018
- Under the Umbrella** 1019
- Pages from the Past**—Mark Francis: the man
and the legend 1020
- Coast to Coast** 1022
- Out and About** 1025
- Deaths** 1026

Zoonosis Update

- Anthrax—Lee Hunter, Wayne Corbett,
and Carol Grindem 1028

The Human Side of Veterinary Medicine

- Narcissistic clients—Jacob Antelyes 1032

Interpretive Summaries of Articles in This Issue

- 1036

Reports of Original Studies

- Intramammary antibiotic treatment at the
end of lactation for prophylaxis and
treatment of intramammary infections
in ewes—William D. Hueston,
Garnard J. Boner, and Steven L. Baertsche .. 1041
- Contribution of propylene glycol-induced
Heinz body formation to anemia
in cats—Mary M. Christopher,
Victor Perman, and John W. Eaton 1045
- Preservation of striated-muscle urethral
sphincter function with use of a surgical
technique for perineal urethrostomy
in cats—D. W. Griffin, C. R. Gregory,
and R. L. Kitchell 1057

Clinical Reports

- Microolithiasis associated with chronic
bronchopneumonia in a cat—
David G. Brummer, Tracy W. French, and
J. Mark Cline 1061
- Repair of pectus excavatum by percutaneous
suturing and temporary external coaptation
in a kitten—Jonathan F. McNulty and
Colin E. Harvey 1065
- Fragments of nasogastric tubes as esophageal
foreign bodies in two horses—
A. N. Baird and Claudia K. True 1068
- Synovial hernia as a possible complication of
arthroscopic surgery in a horse—
David G. Wilson 1071
- X-ray computed tomography-aided diagnosis
of nasal adenocarcinoma, with extension
to the skull and central nervous system,
in a dog—J. E. Sackman, W. H. Adams,
and M. D. McGavin 1073
- Generalized skeletal involvement of a
hematopoietic tumor in a dog—Linda Shell,
Debbie J. Davenport, Don L. Barber, and
William Chickering 1077
- Parosteal osteosarcoma of the mandible in a
dog—James D. Brogdon, Alan H. Brightman,
Lloyd C. Helper, Susan A. McLaughlin, and
Ann L. Johnson 1079

Redefined type of elbow dysplasia involving calcified flexor tendons attached to the medial humeral epicondyle in three dogs—William J. Zontine, Raymond A. Weitkamp, and C. L. Lippincott 1082

Congenital central diabetes insipidus in two sibling Afghan Hound pups—K. Post, J. R. J. McNeill, E. G. Clark, M. A. Digneau, and G. P. Olynyk 1086

Reports of Retrospective Studies

Relation of endogenous Heinz bodies to disease and anemia in cats: 120 cases (1978-1987)—Mary M. Christopher 1089

Horner's syndrome in dogs and cats: 49 cases (1980-1986)—Rhea V. Morgan and Stephen W. Zanotti 1096

Economic Note

1987 US veterinary practice income, expenses, and financial ratios—J. Karl Wise 1100

What Is Your Diagnosis?

A. J. Payton, S. E. Moos, R. L. Pulver, and W. J. Maier 1105

Book Reviews

The Biology and Medicine of Rabbits and Rodents 1070

Parasitology: The Biology of Animal Parasites 1081

Books received but not reviewed 1076

Abstracts of Selected Reports

Suppression of preovulatory luteinizing hormone surges in heifers after intrauterine infusions of *Escherichia coli* endotoxin 1056

Hemolytic anemia and red blood cell metabolic disorder attributable to low phosphorus intake in cows 1088

New veterinary biological products 1078

Announcements

Coming Meetings 1110

Foreign Meetings 1112

Applications for Membership 1113

Certification Examinations 1114

State Board Examinations 1114

Educational Opportunities 1116

Classified Ads 1121

Coming Soon...

May 1 issue

Comparison of bronchodilators in alleviating clinical signs in horses with chronic obstructive pulmonary disease (E. G. Pearson and T. W. Riebold)

Reflections—Carving out a career in Arizona (A. M. Smith)

Special Report—Developing standards on animal research review (R. Dresser)

Plasma concentrations of oxytetracycline in swine after administration of the drug intramuscularly and orally in feed (W. F. Hall et al)

May 15 issue

Research Roundup—Latest on *Borrelia burgdorferi* infection

The Human Side of Veterinary Medicine—Hagglers, slow players, and no payers (J. Antelyes)

Economic Note—Trends in veterinarians' incomes

Side effects of etomidate in dogs (W. W. Muir and D. E. Mason)

Clinical features of salmonellosis in cats (S. W. Dow et al)

Economic Note

1987 US veterinary practice income, expenses, and financial ratios

The 1988 AVMA Biennial Economic Survey of US veterinarians included questions on financial aspects of veterinary practice operation in 1987.¹ Analysis of these survey data emphasized gross practice income, net practice income, returns to capital, labor, and management, cash operating expenses, and operating expense and financial ratios.

Practices were included in this analysis if: they employed at least 1 full-time equivalent veterinarian; they had been established for more than 1 year; they were operational 48 or more weeks in 1987; and they reported gross income, expense, and asset and liability data on the survey.

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This report is the third in a series of monthly Economic Notes summarizing results of the 1988 AVMA Biennial Economic Survey.

Practice income

Mean 1987 gross practice income was \$263,914, up 7.6% from \$245,287 in 1985 (Table 1).² Analysis by practice type showed that mean gross practice income ranged from a low of \$219,008 for small animal predominant practice to a high of \$374,053 for large animal predominant practice (Table 1). Mean gross practice income was \$275,591 for equine practice, \$292,940 for large animal exclusive, \$256,583 for mixed animal, and \$255,215 for small animal practice. A comparison of 1987 and 1985 data showed only slight changes in gross practice income for small animal practice and large increases for large animal practices. This is somewhat of a reversal of the trend in gross income seen from 1983 to 1985.² More specifically, from 1985 to 1987: large animal exclusive gross practice income increased 46%; large animal predominant was up 19%,

mixed animal, up 10%; equine, up 12%; small animal predominant, down 0.3%; and small animal exclusive, up 4%.

Mean 1987 total practice expenses were computed as the sum of all cash operating expenses and employed (non-owner) veterinarian's earnings. Office rent was included in total practice expenses only if practice real estate was leased from other than a veterinarian involved in the practice. Mean total practice expense was \$161,509, ranging from a low of \$129,038 for small animal predominant to a high of \$244,433 for large animal predominant practice (Table 1). Across all types of practice, mean total practice expenses were up 6% from 1985.

Net practice income for 1987 was determined by subtracting total practice expenses from gross practice income. For all practices, mean net practice income was \$102,404, up 10%

Table 1—Mean 1987 practice return (\$) on capital, labor, and management

	Equine predominant	Large animal exclusive	Large animal predominant	Mixed animal	Small animal predominant	Small animal exclusive	All practices
Gross practice income	275,591	292,940	374,053	256,583	219,008	255,215	263,914
Total practice expenses*	168,946	173,729	244,433	159,401	129,038	154,889	161,509
Net practice income†	106,645	119,210	129,620	97,182	89,969	100,325	102,404
Return on capital‡	9,419	6,707	10,012	12,145	12,443	14,696	13,055
Return to labor and management§	97,226	112,503	119,607	85,037	77,526	85,628	89,349
Net practice income per owner	88,243	75,212	59,310	57,833	68,906	77,736	73,280
Return to labor and management per owner¶	79,527	70,732	53,836	49,040	58,614	65,291	62,696
Annual salary per owner#	45,271	51,450	45,233	41,946	43,995	51,993	48,854
Return to management per owner**	34,256	19,282	8,603	7,094	14,619	13,298	13,842
	(95)††	(80)	(182)	(143)	(230)	(208)	

*Total practice expenses include all cash operating expenses plus employed (nonowner) veterinarians' earnings, minus office rent if real estate was leased from veterinarians involved in the practice. †Net practice income equals the difference between gross practice income and total practice expenses. ‡Return on capital was computed as 12% of practice owners' equity. Equity equals the difference between the fair market value of practice fixed assets and long-term debt. §Return to labor and management was computed as net practice income less return on capital || Net practice income per owner was computed by dividing net practice income by the number of full-time equivalent employed owners. ¶Return to labor and management per owner was computed by dividing return to labor and management by the number of full-time equivalent employed owners. # Annual 1987 salary reported by full-time employed practice owners. **Return to management per owner was computed as the residual profit, ie, the return to labor and management per owner less the imputed return to labor per owner (ie, mean salary per owner). ††Number of usable responses.

from 1985. On the average, net practice income represented 39% of gross practice income and showed a narrow range from 35% for large animal predominant practice to 41% for small animal predominant and large animal exclusive practice.

Net practice income includes return on capital invested, return to labor, and return to management. Return on capital invested was computed as 12% of practice equity or net worth. Equity equals the difference between the value of practice fixed assets and long-term debt. Return on capital invested represents a charge against practice income for the capital invested equal to the expected return if the capital were invested in its next best alternative use. Mean return on capital per practice was \$13,055 (Table 1), ranging from \$6,707 for large animal exclusive to \$14,698 for small animal exclusive.

Return to labor and management was computed as net practice income less return on capital. The mean return to labor and management was \$89,349, ranging from \$77,526 for small animal predominant to \$119,607 for large animal predominant (Table 1). On the average, return to labor and management was about 34% of gross practice income.

Income per owner

Net practice income per owner was computed by dividing net practice income by the full-time equivalent number of veterinarian-owners working in the practice. On the average, there were 1.4 owners per practice, ranging from 1.2 for small animal and equine to 2.0 for large animal predominant. The mean number of owners per practice for other practice types were as follows: 1.6, large animal exclusive; 1.7, mixed animal; and 1.3, small animal predominant. These data are nearly identical to data reported for 1985.²

Mean net practice income per owner in 1987 was \$73,280, up 10% from 1985. It ranged from a low of \$57,833 for mixed animal to a high of \$88,243 for equine exclusive.

Return to labor and management per owner averaged \$62,696, up 11% from 1985. It ranged from a low of \$49,040 for mixed animal, up 11% from 1985, to a high of \$79,527 for equine practice, up 34% from 1985. Again, in contrast to the period 1983 to 1985, large animal exclusive and equine practice showed strong gains from 1985 to 1987, while small animal practices showed only modest gains over the same period.

Return to labor represents the owner's time as a veterinarian. In this analysis, return to labor was chosen to equal the annual 1987 salary reported by full-time self-employed veterinarian-owners of practices. The national average owner's salary was \$48,854 in 1987, up nearly 6% from 1985. Large animal exclusive practice owners reported substantially higher salaries in 1987 relative to 1985, while other practice owners reported only modest increases in salaries. For 1987, annual salaries for owners ranged from a low of \$41,946 for mixed animal to a high of \$51,993 for small animal exclusive.

Subtracting owner's salary from return to labor and management per owner yields the return to management per owner. Return to management represents anticipated entrepreneurial profit in excess of the expected return on capital and labor. The mean return to man-

agement per owner was \$13,842 (Table 1). On the average, practices generated about 5% of gross practice income as return to management per owner, but this varied by practice, ranging from 2% to 12% in 1987.

Mean income vs median income

Mean and median 1987 gross practice incomes and returns to labor and management per owner were calculated (Table 2). Mean incomes, commonly called averages, were calculated for Tables 1 and 2 by summing all income values and dividing by the number of respondents. For comparison purposes, median incomes were calculated as the income level that divided the income distribution in half, ie, 50% of all veterinarians earning incomes below and 50% above this income level.

Table 2 shows that the median 1987 gross practice income was \$202,881, roughly \$60,000 less than the mean, or approximately 76% of the mean income value. This difference for 1987 is identical to the difference shown for 1985 data.² This difference between the mean and median highlights the fact that a few very high incomes offset many lower incomes to skew the mean upward.

The mean incomes reported in Table 1 are useful for comparisons across practice types and over time, but median incomes reported in Table 2 more accurately reflect the "typical" practice owner's income. Thus, the median return to labor and management for all practice owners in 1987 was \$52,699, up

Table 2—Mean and median 1987 practice income (\$) and mean number of veterinarians

	Gross practice income		Return to labor and management per owner		Veterinarians (mean)
	Mean	Median	Mean	Median	
Equine predominant	275,591	164,000	79,527	58,208	1.8
Large animal exclusive	292,940	210,000	70,732	65,864	2.1
Large animal predominant	374,053	288,500	53,838	50,315	2.5
Mixed animal	256,583	211,000	49,040	43,297	2.3
Small animal predominant	219,008	164,000	58,614	48,600	1.7
Small animal exclusive	255,215	200,700	85,291	54,174	1.7
All practices	263,914	202,881	62,696	52,699	1.8

Table 3—Mean 1987 gross practice income (\$) and gross practice income (\$) per veterinarian, by number of veterinarians

No. of veterinarians	Equine predominant	Large animal exclusive	Large animal predominant	Mixed animal	Small animal predominant	Small animal exclusive
1 (1 to 1.5)*	142,248† 138,397‡	139,992 139,364	136,035 133,486	132,190 128,102	137,741 132,378	160,119 151,806
2 (1.6 to 2.5)	266,507 133,253	251,935 125,058	330,323 163,031	229,913 114,827	253,179 123,888	329,272 158,919
3 (2.6 to 3.5)	543,218 182,614	439,941 146,647	476,007 155,969	389,567 119,599	353,476 116,333	361,677 119,828
4 (3.6 to 4.5)	759,633 180,084	593,410 145,380	547,732 136,031	441,592 109,557	545,811 132,703	618,419 154,604
≥5 (≥4.6)	1,067,803 167,161	811,244 154,915	934,670 153,014	663,000 99,613	821,636 153,135	923,708 161,268
All practices	275,591 144,899 (95)§	292,940 138,261 (80)	374,053 147,676 (182)	256,583 118,843 (143)	219,008 127,913 (230)	255,215 149,313 (208)

*Numbers in parentheses represent the range of full-time equivalents. For purposes of discussion in the text, the range of 1 to 1.5 will be referred to as a 1-veterinarian practice, and 1.6 to 2.5 as a 2-veterinarian practice, etc. †1987 mean gross practice income. ‡1987 mean gross practice income per veterinarian. §No. of usable responses.

8.7% from \$48,479 in 1985.

Practice mean and median income values in Table 2 are associated with mean number of veterinarians per practice. Overall, the mean number of veterinarians was 1.8, and ranged from 1.7 in small animal practice to 2.5 for large animal predominant practice.

Practice income and number of veterinarians

To provide a perspective on the relationship between gross practice income and number of veterinarians, the sample of practices was divided into 5 classes according to the number

of veterinarians in the practice (1, 2, 3, 4, or 5).

In 1987, gross practice income per veterinarian ranged from \$118,843 for mixed animal practice to \$149,313 for small animal exclusive (Table 3). In general, 1-veterinarian practices generated between \$130,000 and \$160,000/yr, depending on practice type, 2-veterinarian practices generated \$250,000 to \$330,000/yr, and 3-veterinarian practices generated \$350,000 to \$540,000/yr.

Regarding gross revenue per veterinarian, small animal predominant and exclusive practices showed gains of 5% and

9%, respectively, from 1985 to 1987.² Mixed animal and equine practice gross revenues per veterinarian gained 10% and 11%, respectively, over the same 2-year period. It was in the agricultural sector that large animal veterinarians made substantial gains in gross revenue generated per veterinarian, increasing 18% for large animal predominant and 30% for large animal exclusive from 1985 to 1987.

Practice expenses

Veterinary practice owners reported 1987 cash expenditures for 21 practice expense items (Table 4). Mean annual

Table 4—Mean 1987 practice cash expenses (\$), by type of practice

Expense item*	Equine predominant	Large animal exclusive	Large animal predominant	Mixed animal	Small animal predominant	Small animal exclusive	All practices
Employed (nonowner) veterinarian wages	59,018	36,111	41,485	37,368	27,429	28,163	31,949
Nonprofessional staff wages	28,861	19,499	29,508	28,611	32,269	44,662	38,033
Payroll taxes	9,208	10,892	9,341	8,968	8,012	10,168	9,622
Drugs and hospital supplies	54,076	86,153	132,038	70,236	41,628	38,926	53,873
Office supplies	4,129	2,470	4,191	4,146	4,148	4,309	4,168
Office rent	6,759	5,095	8,818	7,611	9,248	16,807	13,079
Equipment rental	4,558	4,484	2,106	3,592	3,029	4,764	4,103
Auto expense	7,661	9,612	9,563	5,660	3,167	2,367	4,041
Utilities and telephone	5,982	4,505	5,313	6,128	5,485	7,068	6,398
Laboratory fees	4,451	2,759	3,801	2,639	3,088	5,542	4,575
Property taxes	1,901	1,734	1,773	1,960	1,695	2,442	2,159
Licenses, permits, dues, subscriptions	1,228	1,272	1,312	1,089	1,178	1,357	1,295
Building and equipment repair and maintenance	1,965	1,879	2,423	2,581	2,605	3,018	2,755
Accounting and legal	2,483	1,958	2,124	1,715	1,589	2,358	2,150
Insurance	7,021	6,591	6,505	5,954	4,855	5,614	5,683
Interest	6,147	3,904	5,367	6,523	6,384	7,539	6,828
Continuing education and travel	2,228	1,953	1,735	1,347	1,203	1,628	1,592
Disposal	1,006	454	576	794	801	1,062	921
Feed	3,423	4,407	4,577	1,962	3,561	4,060	3,850
Pension and profit-sharing (nonowners)	6,205	8,340	9,992	4,685	7,004	5,407	6,225
Miscellaneous	7,946	4,195	5,193	5,359	5,997	7,992	7,020

*Includes only practices incurring an expense for each item; missing values and zero expenses were excluded.

Table 5—Mean 1987 practice cash expenses as a percentage of total practice expenses and gross practice by revenue, by type of practice

Expense item*	Equine predominant			Large animal exclusive			Large animal predominant			Mixed animal			Small animal predominant			Small animal exclusive			All practices		
	% of total expenses	% of gross revenue	% of total expenses	% of total expenses	% of gross revenue	% of total expenses	% of total expenses	% of gross revenue	% of total expenses	% of total expenses	% of gross revenue	% of total expenses	% of total expenses	% of gross revenue	% of total expenses	% of total expenses	% of gross revenue	% of total expenses	% of total expenses	% of gross revenue	% of total expenses
Employed (nonowner) veterinarian wages	18.4	13.4	14.9	9.6	9.4	13.2	13.2	9.4	15.1	10.9	14.0	9.5	12.5	8.5	13.4	9.2					
Nonprofessional staff wages	15.0	10.5	12.1	7.4	8.1	12.9	12.9	8.1	17.5	11.1	22.9	14.4	26.0	17.0	22.4	14.5					
Payroll taxes	5.3	3.4	4.9	2.9	2.4	4.0	4.0	2.4	5.0	3.3	5.2	3.4	5.9	3.9	5.4	3.6					
Drugs and hospital supplies	39.3	25.0	50.1	29.1	35.7	55.0	55.0	35.7	43.9	27.9	34.0	21.0	27.9	17.5	34.3	21.6					
Office supplies	3.2	1.9	2.1	1.2	1.4	2.3	2.3	1.4	2.7	1.7	3.6	2.5	3.0	1.9	3.0	1.9					
Office rent	6.7	5.7	4.2	2.4	2.2	3.3	3.3	2.2	5.9	4.0	10.8	6.8	11.5	7.5	9.6	6.3					
Equipment rental	3.6	2.3	2.6	1.4	1.2	2.4	2.4	1.2	2.3	1.4	2.5	1.6	2.4	1.6	2.5	1.6					
Auto expense	7.4	5.1	8.3	4.4	3.1	5.5	5.5	3.1	4.3	2.7	3.4	2.0	2.2	1.4	3.4	2.1					
Utilities and telephone	4.8	3.2	3.9	2.0	1.9	3.1	3.1	1.9	4.4	2.9	5.0	3.1	5.2	4.9	4.8	3.9					
Laboratory fees	3.6	2.3	2.1	1.1	0.9	1.7	1.7	0.9	1.7	1.0	2.1	1.4	3.3	2.1	2.8	1.7					
Property taxes	1.6	0.9	1.2	0.6	0.7	1.1	1.1	0.7	1.4	0.9	1.6	1.0	1.9	1.2	1.7	1.1					
Licenses, permits, dues, subscriptions	1.3	0.6	1.2	0.6	0.4	0.9	0.9	0.4	0.9	0.6	1.1	0.7	1.1	0.7	1.1	0.7					
Building and equipment repair and maintenance	2.1	1.4	1.2	0.6	0.8	1.3	1.3	0.8	1.8	1.1	2.5	1.5	2.3	1.4	2.1	1.3					
Accounting and legal	2.0	1.3	1.2	0.7	0.6	1.0	1.0	0.6	1.2	0.7	1.4	0.8	1.6	1.0	1.5	0.9					
Insurance	5.3	3.4	4.4	2.5	1.9	3.1	3.1	1.9	4.2	2.6	3.9	2.4	3.6	2.2	3.8	2.3					
Interest	4.3	2.7	3.4	2.1	2.2	3.3	3.3	2.2	4.8	3.1	5.7	3.8	5.5	3.6	5.1	3.3					
Continuing education and travel	1.9	1.2	1.7	0.8	0.6	0.9	0.9	0.6	1.0	0.6	1.2	0.7	1.2	0.7	1.2	0.7					
Disposal	0.6	0.3	0.3	0.2	0.1	0.2	0.2	0.1	0.5	0.3	0.6	0.4	0.6	0.4	0.5	0.3					
Fuel	2.2	1.5	2.2	1.3	1.2	1.9	1.9	1.2	1.6	1.1	2.3	1.5	2.5	1.6	2.3	1.5					
Pension and profit-sharing (nonowner)	3.2	2.2	3.8	2.4	1.9	2.9	2.9	1.9	2.2	1.4	3.4	2.0	2.6	1.5	2.8	1.7					
Miscellaneous	5.7	4.0	3.1	1.8	1.3	1.9	1.9	1.3	3.2	2.2	4.7	3.5	4.5	3.0	4.2	2.8					

*Includes only practices incurring an expense for each item; missing values and zero expenses were excluded.

Table 6—Median 1987 veterinary practice financial ratios

	Equine predominant	Large animal exclusive	Large animal predominant	Mixed animal	Small animal predominant	Small animal exclusive	All practices
Return to labor and management: gross practice income	0.35	0.40	0.32	0.33	0.34	0.32	0.33
Total practice debt: total practice assets	0.29	0.29	0.25	0.22	0.37	0.31	0.30
Total practice debt: practice net worth	0.54	1.10	0.71	0.52	0.69	0.59	0.63
Current assets: current liabilities	3.00	4.83	2.50	2.60	1.83	2.50	2.52
Drug and hospital supply expense: drug and hospital supply inventory	4.47	4.51	3.68	3.15	4.00	4.36	4.15

expense for each expense item was determined by practice type for those practices incurring a particular expense.

With the exception of small animal exclusive, drugs and hospital supply expenses represented the greatest expense item, ranging from \$38,926 for small animal exclusive to \$132,038 for large animal predominant practice. While equine and small animal practice sectors showed little increase or even a slight decline in drug and hospital supply expenses from 1985 to 1987, large animal practices showed large increases in this expense category: large animal exclusive, up 36%; large animal predominant, up 19%, and mixed animal practice, up 21%.

Operating expense ratios or percentages also were developed for the 21 practice expense items (Table 5). For each practice, each expense was divided by total practice expenses and then by gross practice income. Missing values or zero expenditures for a particular expense were not included in the computation of the percentage for that particular expense item. For this reason, the sum of all operating expense percentages for a particular practice type equals more than 100%.

Operating expense ratios showed little change from 1985.² Drugs and hospital supply expenses remained at approximately 30% and 35% for large animal exclusive and large animal predominant, respectively. Likewise, ratios were stable in the small animal practice sector.

Financial ratios

Five financial ratios were

computed to examine the relationship of certain financial variables to one another (Table 6). Ratios presented here are not absolute criteria for operating performance, but rather represent industry benchmarks or averages.

As a measure of profitability, the median ratio of practice owner's return to labor and management to gross practice income was determined to be 0.33, showing no change from 1985. This means that, on the average, after deducting all practice expenses, including an expected return on capital invested (owners' equity) in the practice, practice owners' net income before personal taxes from practice was 33% of gross practice income. Stated another way, for every dollar of gross practice receipts generated in 1987, 33 cents was net income to the practice owner(s). Across practice types, the ratio varied from a low of 0.32 for small animal exclusive and large animal predominant to a high of 0.40 for large animal exclusive.

As a measure of long-run solvency, the median ratio of total practice debt to total practice assets was estimated to be 0.30, down from 0.34 in 1985 and 0.39 in 1983.^{2,3} This ratio is useful to creditors, because it indicates the proportion of practice assets that are financed outside the practice. Much of the decline in this ratio is attributable to a decrease from 0.38 in 1985 to 0.31 in 1987 for small animal exclusive, and from 0.33 in 1985 to 0.22 in 1987 for mixed animal practice. Large animal exclusive practice total debt to total assets ratio was unchanged from 1987.

Another measure of long-run solvency is total practice debt to practice net worth, or owner's equity. If this ratio is greater than 1.0, then external debt is greater than owner's equity and, from a creditor's point of view, the practice may be undercapitalized. In 1987, this ratio was 0.63, compared to 0.65 in 1983, suggesting that owners are not highly leveraged through outside financing.

A measure of a practice's ability to meet short-term debts is the acid-test or quick ratio. The acid-test ratio relates current assets (ie, cash, short-term marketable securities, and accounts receivable) to total current liabilities (ie, accounts payable and notes payable in 1 year). The median acid-test ratio of current assets to current liabilities was 2.52 in 1987, up from 2.08 in 1985. Ratios were up from 1985 for all practice types, except large animal predominant and small animal predominant.

Inventory turnover ratio measures how many times a practice's inventory has been depleted during the year. Median inventory ratio was computed by dividing drugs and hospital supply expenses by the value of drugs and hospital supply inventory. In 1985, the ratio was 4.15, nearly equal to the 4.04 ratio in 1985.

1. Wise JK. 1987 incomes of US veterinarians. *J Am Vet Med Assoc* 1989; 194:563-566.

2. Wise JK. 1985 US veterinary practice income, expenses, and financial ratios. *J Am Vet Med Assoc* 1987; 190:1594-1598.

3. Wise JK. 1983 US veterinary practice income, expenses, and financial ratios. *J Am Vet Med Assoc* 1985; 186:605-608.